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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,071	06/27/2002	Alf Hammes	1999DE507	7262

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EXAMINER	
WHITE, EVERETT NMN	

ART UNIT	PAPER NUMBER
1623	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/070,071	HAMMES, ALF	
	Examiner	Art Unit	
	EVERETT WHITE	1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 September 2004* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 10-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 17, 2004 has been entered.

2. The amendment filed September 17, 2004 has been received, entered and carefully considered. The amendment affects the instant application accordingly:

(A) Claim 9 has been canceled;
(B) New Claims 19-21 have been added;
(D) Comments regarding Office Action have been provided drawn to
    (i) 103(a) rejection, which has been maintained for the reasons of record;

3. Claims 1-8 and 10-21 are pending in the case.

4. The text of those sections of title 35, U. S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

5. Claims 1-8, 10, 11 and 19-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Traill et al (US Patent No. 1,943,461) in view of Savage (US Patent No. 3,728,331) for the reasons set forth on pages 2-4 of the Office Action mailed September 4, 2003.

6. Applicant's arguments filed September 17, 2004 have been fully considered but they are not persuasive. Applicants added new Claims 19-21, which are dependent from Claim 1, which include additional limitations that include viscosity measurement, the application of specific organic acids in the process and the temperature of the hydrolytic degradation being carried out from 70°C to 105°C. These limitations fall within the teaching of the Traill et al patent in view of the Savage patent. See the

paragraph bridging columns 1 and 2 of the Traill et al patent wherein oxalic, acetic, and formic acids may used to carry out the process thereof. See column 1, line 62 of the Savage patent, which recites a temperature ranging from 50 to 156°C for the process thereof. The combination of the Traill et al and Savage patents meet the limitations of newly added Claims 19-21.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the amount of acid used in the process of the instant claims, which range from about 4 to about 16%) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicants argue that the teachings of the Savage patent differ from those of the present invention such that one skilled in the art would not have looked to Savage in an effort to formulate the present invention. An Example pointed out by Applicants includes a description of alkaline reaction conditions in the Savage patent wherein the present invention uses acidic reaction conditions. This argument is not present since the alkaline condition recited in the Savage patent is optionally or is not a required condition of the Savage patent. The Savage patent specifically recite that pH of the peroxide solution is not a critical factor (see column 3, line 19). It is also noted that the pH recited in the process of the instant claims (see instant Claim 8) and the Savage patent (see column 3, line 24) overlaps at pH 8.

Applicants further argue that the Savage process discloses a small amount of hydrogen peroxide sprayed onto cellulose ether, which is essentially dry and free-flowing particulate form rather than an aqueous slurry as instantly claimed. Applicants argue that the moisture content of the cellulose as taught in the Savage patent should be below 5% by weight and that the amount of hydrogen peroxide is preferably in the range of from 0.1 to 5.0% by weight, based on the weight of the dry cellulose ether. This argument is not persuasive since Example 1 of the Savage patent recites a process wherein the hydroxypropylmethycellulose is in a 2% aqueous solution. See instant Claim 3 wherein the viscosity of the cellulose ether is measured as a 2.0%

solution as recited in Example 1 of the Savage patent. See column 3, lines 39-42 of the Savage patent wherein hydrogen peroxide is applied to a cellulose ether at an amount ranging from 0.1 to 5.0 weight percent, based on dry cellulose ether, which covers part of the range of the amount of oxidizing agent set forth in instant Claim 1.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as set forth in the Office dated September 4, 2003, one would be motivated to combine the teachings of the Traill et al and Savage patents in a rejection of the claims under 35 U.S.C. 103 since both patents disclose procedures for depolymerizing or reducing the viscosity of cellulose ethers.

Accordingly, the rejection of Claims 1-8, 10, 11, and 19-21 under 35 U.S.C. 103(a) as being unpatentable over the Traill et al patent in view of the Savage patent is maintained for the reasons of record.

7. Claims 12-18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the Kobayashi et al Patent in view of the Savage patent for the reasons set forth on pages 4 and 5 of the Office Action mailed September 4, 2003.

8. Applicant's arguments filed September 17, 2004 have been fully considered but they are not persuasive. Applicants argue against the rejection on the ground that the Kobayashi et al patent describes a method whose end product inherently results in a salt content of 2.6%, which is much higher than the 0.4% which inherently results by following the process of Claim 1 of the present invention. This argument is not persuasive because the Kobayashi et al patent does not disclosed that the methyl-hydroxypropylcellulose thereof has a salt content of 2.6% and Applicants have not set forth how they derived that the methylhydroxypropylcellulose in the Kobayashi et al patent has a salt content 2.6%. Although, the process disclosed in the Kobayashi et al patent set forth alkali cellulose as an intermediate product that is used to prepare hydroxypropylmethylcellulose, there is no disclosure in the Kobayashi et al patent that after purification of the reaction system with hot water (see page 7, 1st paragraph) that the hydroxypropylmethylcellulose as a final product comprises a salt content of 2.6%.

Applicants argue that the Savage patent also uses alkaline reaction conditions to produce the hydroxypropylmethylcellulose. Although, alkaline oxidation of cellulose is mentioned in the background of the patent, it cannot be concluded that the hydroxy-propyl methylcellulose thereof has a salt content greater than 0.4% since Savage discloses that the pH of the peroxide solution used in the Savage patent is not a critical factor and sets forth a possible pH of the peroxide solution in the Savage patent of 8, which overlaps the pH value that may be used in the process of the instant application.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, one of ordinary skill in this art would be motivated to combine the teachings of the Kobayashi EP patent with the teachings of the Savage patent since both patents set forth hydroxypropyl-methyl cellulose and procedures that involve depolymerizing the cellulose ethers, which

provides sufficient motivation for combining the references in a rejection of the claims under 35 U.S.C. 103.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Accordingly, the rejection of Claims 12-18 under 35 U.S.C. 103(a) as being unpatentable over the Kobayashi et al Patent in view of the Savage patent is maintained for the reasons of record.

Summary

9. Claims 1-8 and 10-21 are rejected.

Action Made Final

10. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Examiner's Telephone Number, Fax Number, and Other Information

11. For 24 hour access to patent application information 7 days per week, or for filing applications, please visit out website at **www.uspto.gov** and click on the button "Patent Electronic Business Center" for more information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is (571) 272-0660. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, can be reach on (571) 272-0661. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

E.White

James O. Wilson
Supervisory Primary Examiner
Technology Center 1600